

INDEX TO VOLUME 82

- Aceraceae 256
Acer negundo 252, 286, *rubrum* 258, 286,
 saccharinum 286
 acid damage of phage WPK 213
 Adams Co., OH, lichen flora 302
 adsorption site of phage WPK 213
Aesculus glabra 218
Agelaius phoeniceus 133
Agrimonia parviflora 255
 Akron, OH, land values 114
 algae 183
 Alismataceae 256
Alliaria officinalis 254
Allocreadium pseudotritonia 121
Alnus rugosa 188
 Alther, G. R. 293
 Amiidae 308
 Anacardiaceae 256
Anacharis 188
Anaptychia palmulata 303
 Andrews, D. A. 133
Andropogon gerardi 19, *scoparius*, 19
Angelica atropurpurea 255
 Angiotensin II in hemorrhagic hypotension 179
Anodonta grandis 243
Anodontoides ferussacianus 243
Aplodinotus grunniens 194
 Apocynaceae 256
 Araceae 256
 arborescent species 282
 Aristolochiaceae 256
 Arndt, R. S. 128
Artemia salina 226
 Ashtabula, OH, wave activity near 293
Aster novae-angliae 254, *pilosus* 252
 Astruc, J. 38
 Atherinidae 309
Arylotus 170, *bicolor* 171, *ohioensis* 171
Aulodrilus 168, *americanus* 168, *piguetti* 167

Baeomyces fungoides 303
 Balsaminaceae 256
 Bantu coronary circulation 146
 Barrett, G. W. 55
 bass, smallmouth 266
 Beal, K. G. 238
 behavior, bass nesting 266
 Benthos-St. Lawrence River 165
 Berra, T. M. 311
Betula lutea 188, *pumila* 255
Bidens 103
 Bildstein, K. L. 238
 Bimber, D. L. 193
 bioenergetics, screech owls 55
 birds, agricultural area 128, cockerels 260, wildlife
 area 128
Bithynia tentaculata 165
 bivalve, distribution 242
 Bluestem, growth response 19

Bombus 12 spp. 218, 221, 224
 Bookhout, T. A. 103
 Book reviews
 Biographical Dictionary of Rocky Mountain
 Naturalists 143,
 Creation/Evolution 311,
 Fishes of Ohio 215,
 Mammals of Ohio 70
 Bork, K. B. 74
 Botoman, G. 52
Botrychium 219
 bottom grab evaluations (or grab sampler
 evaluations) 107
Brachycoelium salamandrae 121, *storeriae* 121
 Brackney, A. W. 229
 Brown, F. 66
 butterflies, Cedar Bog, OH 141

 Caesalpiniaceae 256
Calamagrostis canadensis 103
Calanus 228
 Calcott, P. H. 59
Cambarus affinis 185, *bartonii carinirostris*
 (new record) 136, 181, *diogenes diogenes* 243,
 laevis 191, *ortmanni* 242, *robustus* 181,
 sciotensis 190, *sloani* 244, unidentified 184
 Campanulaceae 256
Campostoma anomalum 270
Candelaria concolor 303
 Caprifoliaceae 256
Carassius auratus 194
Carex 103, *stricta* 252, *trichocarpa* 255
 Carline, R. F. 201
Carpinus caroliniana 286
Carya cordiformis 286, *ovata* 131, 286
 Castelo-Branco, N. 146
 Catalano, P. A. 120
 cat cortex 38
 Catostomidae 307
Catostomus commersoni 194, 202
 Cedar Bog, horseflies and deer flies 171
 Celastraceae 256
Celtis occidentalis 286
 Centrarchidae 308
Cephalanthus occidentalis 255
Cephalodella 246
 Ceratophylliaceae 256
Cetraria 4 spp. 303
Chaetonotus 246
 Chagrin River, OH, crayfishes 181
 Champaign Co., OH 252
Chaoborus 208
Chara 188
 Chironomidae 165, 167, 168
 Chorpenning, F. W. 31
Chrysops 15 spp. 171, 173
Cimicifuga 219
Circus cyaneus 238
 Cisneros, A. 260

- Cladina rangiferina* 303, *subtenuis* 303
Cladonia 20 spp. 303, 304
Cladophora 183, 193, 267
 Clare-Bishop area 38
 Clark Co., OH, Manring Mounds 151
 clay-colored sparrow in Ohio 211
Claytonia 219
Clematis virginiana 252
 Clupeidae 307
Clethrionomys britanicus 238
Clinotanytus 165
Colinus virginianus 129
Collema coccophorum 304, *conglomeratum* 304
Colurella 3 spp. 247
 Commelinaceae 256
 Compositae 256
 concretions ferruginous 14, siderite 52
 Convolvulaceae 256
 Corcos, A. 66
 corn, bird and mammal damage 133
 Cornaceae 256
Cornus alternifolia 258, *amomum* 286,
drummondii 286, *obliqua* 252, 286, *stolonifera* 254
 coronary circulation in the Bantu 146
Corylus americana 286
 Cramer, A. C. 151
 Crassulaceae 256
Crataegus 286, *culpodendron* 254, *monogyna* 254,
punctata 252
 crayfishes, Chagrin River 181
 distribution 242, new subspecies record, 136
 Creation/Evolution, book review 311
Crepidobothrium cryptobranchi 121
 Cruciferae 256
 Crustacea; copepoda 225
Cyclops vernalis 225
 Cyperaceae 256
Cyperus 103
 Cyprinidae 307
 Cyprinodontidae 307
Cyprinus carpio 194
Cypripedium acaule 224

 Danek, L. J. 293
 Decapoda: Cambaridae 181
Decodon 255
 deer flies, horseflies of Cedar Bog 170
 DeLong, D. M. 2, 140
 Delphia, J. M. 260
Dendroica discolor 212
Dentaria 219
Dermatocarpon fluviatile 304, *tuckermannii* 304,
miniaturum 304
 diatoms 267
Dicentra canadensis 218
Dicranophorus 247, *hercules* 247
 Dieringer, G. 218
 Dipsacaceae 256
 Diptera: Tabanidae 170
Distomum cygnoides 121
 distribution, crayfish and bivalve 242

Dorosoma cepedianum 202
 Drees, B. M. 141, 170
 Dryopteris 255
 Dunkirk Harbor creel survey 193
 Dutt, A. K. 114

 Eaton (Hopewell) Furnace 23
 ecology, of gallinules 229,
 of *Orchis spectabilis* 218,
 importance of noctuids 299
 Edwards, C. J. 96
 Edwards, F. 311
 Ekman grab sampler 107
Eleocharis erythropoda 254
Elliptio complanata 168
 epiphytes 260
 Equisetaceae 256
Equisetum arvense 255
Ericymba buccata 216
Escherichia coli 213
 Esocidae 307
Esox lucius 194, *masquinongy* 194
 Etges, F. J. 120
Etheostoma exile 308, new record for 138,
flabellare 306
Euchlanis 247
Euglena gracilis 225
Euonymus atropurpureus 286
Eupatorium 35 spp. 252, 258
Euphydras phaeton, Cedar Bog 141
Eutamias speciosus 238
 Evans, W. A. 246

 Fabaceae 256
Falco sparverius 238
Fallicambarus (Creaserinus) fodiens, new record 136
 Farney, R. A. 103
 Faure, G. 52, 196, 274
 feldspar-provenance dates 274
Peniseca tarquinius tarquinius, Cedar Bog 141
Fessidentis nectororum 121
Filipendula rubra 255
 fisheries, 4 rainbow trout warmwater, in
 southeastern Ohio 201
 Fishes of Ohio, The, book review 215
 Portage River, OH 306
 flora, macrolichen 302,
 Ruppia maritima 68, survey 252
Fraxinus 255, 5 spp. 282, 286
 Freytag, P. H. 2
Fundulus diaphanus 308

 Gadidae 309
 Gahanna, OH, tills 274
Galium aparine 254
Gallinula chloropus 229
 gallinules, common 229
Gammarus 165
 gastrotrichs 246
 geology, Mather biography 74
Geranium maculatum 218

- glucose, *in vitro* transport, 49
Gomphonema affine var. *elongatum* 30
Gorgoderina bilobata 121
Gorilla g. gorilla 27
 Gotshall, R. W. 177
 Gramineae 256
 Grande, N. 146
 Griswold, B. L. 96
Gymnocladus dioica 286
Gymnotus carapo 27
Gyrinophilus porphyriticus 120

Haemaphysa 170, *rara* 171
 Hamilton, E. S. 282
 Harder, J. D. 72
 harrier 238
 hatching 225
 Haynes, J. M. 165
 hearts, Bantu and Caucasians compared 146
 Hedeon, S. E. 27
 Helm, J. G. 225
 hemorrhagic hypotension, role of angiotensin II,
 in rat 177
Hepatica 219
Heterodermia 6 spp. 304
Hibiscus palustris 103
 Hippocastanaceae 256
 Holomuzki, J. 138
 Holomuzki, V. 138
 Hopewell, Manring Mounds 151
 horseflies, deer flies of Cedar Bog, OH 170
 Host, G. E. 142
 Hubschman, J. H. 225
Hybomitra 170, *lasiophthalma* 171, *sodalis* 172
Hybopsis amblops 306, *storeriana* 308
Hydraecia immanis 299, *micacea* 299, *stramentosa* 299
 Hydrocharitaceae 257
Hypentelium nigricans 270
 hypergravity (2g) 260
Hypotrachyna livida 304, *showmanii* 304
Hypsibius angusti 246, *saltursus* 246

Ichthyidium 246
Ichthyomyzon unicuspis 308
 Ictaluridae 307
Ictalurus 202
Ilex 255
 immunologic effects, teichoic acid 31
Impatiens 103, 219
 Indian Creek, OH 266
 Ingold, J. L. 211
 intestinal growth, rat 49
 Iowa darter, new record 138
Iris pseudacorus 218
 isotopic study, siderite concretions 52

 Jezerinac, R. F. 136, 181
 Johnston, T. B. 201
 Juglandaceae 257
 Juncaceae 257
Juncus 255

 Kaucher, P. R. Jr. 302
 Kelly, S. T. 133
 kestrel, American 238
 Khan, A. 114
 Kiser Lake State Park, OH 252

 Labiatae 257
 LaGory, K. E. 19
 LaGory, M. K. 19
 Lake Erie marshes 229, sandy beaches 246,
 thermal discharge in 193, water levels 103, wave
 activity 293
 Lallo, J. W. 161
Lampsilis radiata 168
 Lang, E. 260
 Laskowski-Hoke, R. A. 306
 lateral suprasylvian area 38
 Lauraceae 257
 leafhopper, *Scaris*, n. sp. 2
Lecane 246, 8 spp. 247
Leersia oryzoides 254
 Lemnaceae 257
 Lepadella 247
Lepidodermella 246
 Lepisosteidae 307
Lepomis cyanellus 202, *macrochirus* 202
Leptogium 6 spp. 304
 lesions, traumatic in Ohio protohistoric
 populations 161
Lethe portlandia anthedon, Cedar Bog, 141
 Lewis, P. A. 107
 Liliaceae 257
Lindera benzoin 286
 Limbird, A. 282
Limnodrilus 3 spp. 168
Liriodendron tulipifera 258
 Lobeliaceae 257
Lonicera maaackii 212, *xylosteum* 212
Lopomis megalotis 306
Lota lota 306
 Loveland, D. G. 68
Ludwigia 255

 macroinvertebrate communities 165
 macrolichen flora 302
 Maier, S. 213
 Makarewicz, J. C. 165
 Mammals of Ohio, A Guide to the, book review 70
 Manring Mounds, Hopewell Center 151
Marmota caligata 238
 Mason, W. T. Jr. 107
 Mather, K. F. 74
 Mazzer, S. J. 142
 McGrath, A. J. 38
Melanella subaurifera 304
 Menispermaceae 257
 Metzler, E. W. 299
Microthema gracilis 172
 micrometazoans 246
Micropterus dolomieu 266, *salmoides* 202
Microspectra 168

- Microtus agrestis* 238, *pennsylvanicus* 238
Mimulus 103
Mollusca 167
mollusks 165
Montgomery, R. D. 177
Moxostoma 270, 3 spp. 306
mud salamanders 120
Musculium lacustre 168, *transversum* 243

Najadaceae 257
nature preserves, Adams Co., OH 302
naupliar development 225
necrology 313
Neff, K. L. 252
Negulesco, J. A. 260
nesting, bass 266
Nigro, A. A. 193
Nocomis biguttatus 306
noctuids, two new 299
Norrocky, M. J. 306
Notropis anogenus 306, *cornutus* 270, *emiliae* 308,
heterolepis 306, *volucellus* 308
Noturus miurus 306

Ohio Academy of Science, officers' list 1982-83 318
Ohio Journal of Science, reviewers of papers 1981
72, statement of ownership, management and
circulation 69
Oleaceae 257
Oligochaeta 165
Omeia papillocauda 121
Onagraceae 257
Oncorhynchus kisutch 193
Ondatra zibethica 103, *zibethicus* 256
Ophioglossaceae 257
Orchis spectabilis 218
Orconectes immunis 181, *limosus* 183, *obscurus* 183,
propinquus 181, 270, *rusticus* 181, 243, *sanbornii*
sanbornii 181, *sloanii* 242, *virilis* 181
Orr, L. P. 138
Orr, S. R. 52
Osmon, P. 311
Osmunda 219
Ostrya virginiana 286
Ottawa Co., OH, species on soil 282
Oxalidaceae 257
oxygen, dissolved 225
Oxysomatium brevicaudatum 121, *longicaudata* 121
Oxyuris dubia 121

Palmer, D. T. 133
Papaipema nebris 299
Papilio polyxenes asterius, Cedar Bog 141
Paratendipes 168
Parmelia 10 spp. 304
Parmeliopsis 2 spp. 304
Parmotrema 5 spp. 304
Parthenocissus quinquefolia 252, 286
Passer domesticus 130
Pedicularis canadensis 218
Pelosclex ferox 168

Peltigera 4 spp. 304
Perca flavescens 194, 202
Percichthyidae 309
Percidae 307
Percina 2 spp. 308
Percopsidae 309
Perino, J. V. 19
Peromyscus leucopus 240
Petersen grab sampler 107
Petromyzontidae 308
Phaeophyscia 6 spp. 304
phage WPK, acid damage of 213
Phalaris 255
Pharyngodon 121
Phenylthiocarbamide, threshold perceptions 66
Philobela minor 129
Phrymaceae 257
Physaloptera 121
Physcia 5 spp. 304
Physconia detera 304
Plagioporus gyripophili 121
Platanaceae 257
Platimatia tuckermanni 305
Platypona sindveda, new genus, 140
Polemoniaceae 257
pollination 218
Polygonaceae 257
Polygonum coccineum 234
Polymereus 247
Polypodiaceae 257
Ponar grab sampler 107
population, gallinules 229
Populus deltoides 131, 258, 286, *tremuloides* 255
Portage River, OH, fishes 306
Postler, J. L. 55
Potamothebrix 167, *vejdovskyi* 167, *moldaviensis* 167
Potentilla fruticosa 255
Powell-Union City moraine, strontium anomalies
in till 196
Poxomis annularis 202
Prater, B. L. 306
predators, aerial of voles 238
Primulaceae 257
Procladius 168
Procyon lotor 236, crop damage 134
protohistoric Ohio, skeletal trauma 161
Prunus virginiana 286
Pseudochironomus 165
Pseudoletia unipuncta 300
Pseudomonas aeruginosa 59, 213
Pseudoparmelia 5 spp. 305
Pseudotriton ruber 120
Pycnanthemum virginianum 255
Pyxine 2 spp. 305

Quercus 131, *bicolor* 258, 5 spp. 286

rainbow trout, warmwater fisheries 201
Ramalina 305
Ranunculaceae 257

- rat, role of angiotensin II in hemorrhagic hypotensin 177
 raw materials, Eaton furnace 23
 red salamanders 120
 red-winged blackbirds, crop damage 133
Regulus satrapa 212
 renin-angiotensin system 177
 Rhamnaceae 257
Rhinichthys atratulus 306
Rhus radicans 286
 Ribeiro, A. 146
Ribes americana 286
 Rings, R. W. 299
Rosa 286, 2 spp. 252
 Rosaceae 257
 rotifers 246
 Rubiaceae 257
Rubus 212, 258, 286
Rudbeckia laciniata 258
Ruppia maritima 68
 Rutaceae 257

 Sabatino, C. M. 213
Sagittaria 103, 235, *latifolia* 254
 St. John, F. L. 242
 St. Lawrence River, Benthic communities 165
 salamanders 120
 Salicaceae 257
Salvelinus fontinalis 188
Salix discolor 254, *sericea* 255
Salmo clarki 209, *gairdneri* 193, *trutta* 193
Sambucus canadensis 255, 286
Sanguinari 219
 Saxifragaceae 258
Scaris, 19 new spp., 12 spp. 2-13
 Sciaenidae 310
Scirpus 103, *atrovirens* 254, *validus*, 234, 255
 Scopes Trial 81
 screech owls 55
 Scrophulariaceae 258
 Seeman, M. F. 151
Senecio aureus 258
 siderite concretions 52
 skeletal trauma in protohistoric Ohio 161
 Snider, J. A. 302
Solidago patula 254
 soil types, species occurrence 238
 somatotropin (STH) 260
 Sparganiaceae 258
Sparganium 188, 255, *eurycarpum* 234
 sparrow, clay-colored in Ohio 211
Sphaerium corneum 165, *fabale* 243, *simile* 243, *solidulum* 243, *striatinum* 168, 243
Spirogyra 183
Spirogyra 121
Spizella pallida 211
 Starnes, W. C. 215
Stictochironomus 165
 Stieglitz, R. D. 14
 stream channelization 96
 strontium anomalies in till 196

 Stuckey, R. L. 143
 Summit Co., OH, concretions 14
Sylvilagus floridanus 129

Tabanus 170, 13 spp. 172
 Taylor, D. H. 266
 Taylor, K. S. 196, 274
 teichoic acid 31
Telenomus tabanivorus 172
Thalictrum polygamum 258
Thamnophis sirtalis 270
 thermal discharge at Dunkirk Harbor 193
 Thoma, R. F. 136
Tilia americana 258, 286
 till, stratigraphic section 274
 toposequence, drainage 282
 Toraason, M. A. 49
 Townsend, T. W. 128
Toxolasma parvus 243
Trichocerca 246
Trichogramma minutum 172
Trillium 219
 trout, rainbow, warmwater fisheries 201
Tuber texense, new record 142
 Tubificidae 168
 tubificids 167
Tubifex tubifex 168
 Tuscarawas Co., OH, concretions 52
Typha 188, 234, 245, *angustifolia* 103, *latifolia* 103, 252
 Typhaceae 258

Uca pugilator 228
 Ulmaceae 258
Ulmus 255, *rubra* 286
 Umbelliferae 258
 Ungar, I. A. 68
 Unionidae 243
 Urticaceae 258
Usnea 2 spp. 305

 Van Horn, R. G. 14
 Vankat, J. L. 252
 vegetation, survey 252
 Verbenaceae 258
Verbesina alternifolia 252
Viburnum 219, 255, *lentago* 280, *prunifolium* 286
Viola 2 spp. 254
 Violaceae 258
 Vitaceae 258
Vitis 286
 voles, meadow 238

 wave activity 293
 Weber, C. 311
 Weber, C. I. 107
 wetland, vegetation and flora 252
 White, A. M. 120
 White, J. R. 23
Wierzyskiella 246, *velox* 247
 Wilcoxon, W. 196

Winemiller, K. O. 266
Winous Point, Ottawa Co., OH 103
Woods, L. C. III 96
Woods, P. E. 211
Wright, G. L. 49

Xanthoparmelia 2 spp. 305
Xanthoria fallax 305
Xanthoxylum americanum 286

OHIO BIOGEOGRAPHY CONFERENCE

26 February 1983

The Ohio State University at Newark

Cosponsored by

The Ohio State University at Newark

The Ohio Biological Survey

The Ohio Academy of Science

The Ohio Department of Natural Resources

Division of Natural Areas and Preserves

For Further Information Contact:

The Ohio Biological Survey

484 W. 12th Ave.

Columbus, OH 43210

(614) 422-9645